

Claims

[c1] 1.A louver assembly, said assembly comprising an enclosure, a plurality of louvers formed in the enclosure and positioned parallel to each other, the plurality of louvers having substantially the same configuration, each of the louvers having a front edge on a front portion, a rear edge on a rear portion, and an intermediate edge located between the front edge and the rear edge, adjacent louvers being spaced apart from each other such that a line extending along the front portion from the front edge to the intermediate edge of a lower louver extends to and intersects the rear edge of an upper louver.

[c2] 2.The louver assembly as defined in claim 1 wherein each of the plurality of louvers comprise a front portion and a rear portion that meet at an angle defining the intermediate edge that is displaced away from a straight line extending between the front edge and the rear edge.

[c3] 3.The louver assembly as defined in claim 1 wherein the rear portion of each of the louvers is oriented in a generally horizontal plane.

[c4] 4.The louver assembly of claim 3 wherein the front portion of each of the louvers is in a plane angled downwardly in the direction toward the front edge.

[c5] 5.A welding apparatus comprising an enclosure having a front panel and a rear panel and a base to enclose therein an interior area to contain components for the welding apparatus, a louver assembly formed in at least the rear panel, the louver assembly comprising a plurality of louvers positioned side by side parallel to each other, the louvers having substantially the same cross-sectional profile, each of the louvers having a front edge, a rear edge and an intermediate edge located between the front edge and the rear edge, adjacent louvers being spaced apart from each other to prevent a probe of predetermined diameter from passing the rear edge of any one of the louvers.

[c6] 6.The welding apparatus as defined in claim 5 wherein each of the plurality of louvers has a front portion and a rear portion that meet together at an angle to form the intermediate edge.

[c7] 7.The welding apparatus as defined in claim 5 wherein the louver assembly is

formed in both the front and rear panels.

[c8] 8. The welding apparatus as defined in claim 6 wherein the rear portion of each of the louvers is in a plane that is substantially horizontal.

[c9] 9. The welding apparatus as defined in claim 8 wherein the front portion or each of the louvers is in a plane angled downwardly in the direction toward the front edge.

[c10] 10. The welding apparatus as defined in claim 5 wherein the probe is a straight cylindrical probe and has a predetermined diameter of 2.5 mm.

[c11] 11. A vent assembly to provide air flow into an enclosed heat generating apparatus comprising a series of louvers, each louver having a front portion and a rear portion separated by an intermediate edge, the front portion being at an angle to the rear portion with the intermediate edge being a point of deflection, each louver having a substantially identical cross-section and arranged such that an object having a predetermined width inserted between two louvers cannot pass past the rear portion of any louver.

[c12] 12. The vent assembly of claim 11 wherein the rear portion of each louver is arranged generally horizontally and the front portion is arranged downwardly from the intermediate edge.

[c13] 13. The vent assembly of claim 11 incorporated into a welder having two sets of louvers, one set positioned on an air intake and one set positioned on an air discharge, the welder constructed without screening on either the air intake or the air discharge.

[c14] 14. The vent assembly of claim 11 wherein the louvers are arranged such that a plane defined by the front portion of a first louver intersects the rear portion of a louver above the first louver.

[c15] 15. The vent assembly of claim 11 wherein each louver is tapered front to back from the front portion to the rear portion.

[c16] 16. The vent assembly of claim 13 wherein the set of louvers are connected to

one another through a single center post.

- [c17] 17. The vent assembly of claim 13 wherein the set of louvers is constructed of a one-piece assembly wherein a lower half of the assembly includes the series of louvers terminating at a midpoint of the assembly.
- [c18] 18. The vent assembly of claim 17 wherein an uppermost louver is formed without a horizontal rear portion, and is constructed such that the front portion is connected to a vertically extending member that forms an upper half of the one-piece assembly to form front and rear panels of the welder.
- [c19] 19. The vent assembly of claim 18 wherein the vertically extending member of the uppermost louver includes mounting bosses extending therefrom for attachment of the one-piece assembly to the welder.